



Received  
JUL 05 2019  
Air Quality Bureau

July 3, 2019

Bureau Chief  
Air Quality Bureau  
New Mexico Environmental Department  
525 Camino de los Marquez, Suite 1  
Santa Fe, New Mexico 87505

**Certified Mail/Return Receipt**

7018 0360 0001 7923 5811

**RE:** Amendment to the May 15, 2019 Fenceline Benzene Monitoring Corrective Action Plan for the Artesia Refinery

HollyFrontier Navajo Refining LLC (Navajo) previously submitted a letter on May 15, 2019 for the Artesia, New Mexico Refinery pursuant to the requirements of the National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries (MACT CC) at 40 CFR 63.658(h). This letter summarized investigation activities and corrective actions implemented between April 2017 and November 2018. It also identified a long-term corrective action plan (the ISOM Project) that will result in permanent removal of Tank 57 from its current service and a schedule for the implementation of the ISOM Project. A site map providing the layout of the facility and the fenceline monitoring locations is provided as Figure 1 (attached).

Since submittal of the May 15, 2019 letter, 2-week sample event  $\Delta c$  values have exceeded  $9 \mu\text{g}/\text{m}^3$  for the following sample periods:

- 2/26 to 3/12: sample event  $\Delta c = 10.6 \mu\text{g}/\text{m}^3$   
Monitoring locations 13, 14, and 15 were above  $9 \mu\text{g}/\text{m}^3$
- 3/12 to 3/26: sample event  $\Delta c = 12.5 \mu\text{g}/\text{m}^3$   
Monitoring locations 7, 8, 9, and 10 were above  $9 \mu\text{g}/\text{m}^3$
- 3/26 to 4/9: sample event  $\Delta c = 54.2 \mu\text{g}/\text{m}^3$   
Monitoring locations 13, 14, and 15 were above  $9 \mu\text{g}/\text{m}^3$
- 4/9 to 4/23: sample event  $\Delta c = 66.2 \mu\text{g}/\text{m}^3$   
Monitoring locations 7, 10, 14, 15, and 16 were above  $9 \mu\text{g}/\text{m}^3$
- 4/23 to 5/7: sample event  $\Delta c = 203.5 \mu\text{g}/\text{m}^3$   
Monitoring locations 6, 13, 14, 15, 16, and 17 were above  $9 \mu\text{g}/\text{m}^3$
- 5/7 to 5/21: sample event  $\Delta c = 99.0 \mu\text{g}/\text{m}^3$   
Monitoring locations 14, 15, and 16 were above  $9 \mu\text{g}/\text{m}^3$
- 5/21 to 6/4: sample event  $\Delta c = 28.5 \mu\text{g}/\text{m}^3$   
Monitoring locations 14 and 15 were above  $9 \mu\text{g}/\text{m}^3$

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Because the sample event  $\Delta c$  was less than  $9 \mu\text{g}/\text{m}^3$  before these events, an additional root cause analysis was completed to determine the source of the benzene detections. The result of evaluating these sample events indicate the above sample period  $\Delta c$  exceedances pertain to the temporary return of Tank 57 to service<sup>1</sup>, combined with a damaged seal on Tank 737 and a release of hydrocarbons from Tank 106 that resulted in a damaged roof and seal. Below is a description of Tank 57/737 issues, Tank 106 issues, and corrective actions and schedules for correcting these issues. Pursuant to 40 CFR 63.658(h), Navajo is submitting this letter to the Agency as a long-term corrective action plan, because the tank cleaning and repairs will require more than 45 days to implement.

#### **Tank 106 Issues and Corrective Actions**

On March 26, 2019, there was an overflow of Tank 106, which contains a mixture of water and crude oil. The spilled hydrocarbons were excavated and removed upon discovery of the overflow. On March 29, 2019, the tank seal was inspected and found to be damaged. Planning and coordination for removing this tank from service for cleaning and repair has required more than 45 days. This tank has been isolated from service<sup>2</sup> and is scheduled to be removed from service for cleaning and repairs no later than July 12, 2019.

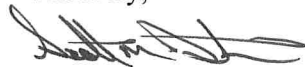
#### **Tank 57/737 Issues and Corrective Actions**

Tank 57 was temporarily taken out of service<sup>1</sup> on November 20, 2018. As explained in Navajo's May 15, 2019 letter, it was necessary to put the tank back into service as a holding tank on April 4, 2019 in connection with replacement of the catalyst in the lead reactor in the BenFree Unit (Unit 20). The catalyst was nearing the end of its useful life and replacement was undertaken in order to lower the benzene content of the light naphtha feed entering the commercial gasoline pool. The catalyst replacement was completed in late April, and Tank 57 levels were drawn down and the tank was isolated from service on May 24, 2015, with no product being moved into or out of the tank. Navajo plans to continue to limit the use of Tank 57 until the ISOM Project is implemented, at which time Tank 57 will be permanently removed from service as a holding tank for the BenFree Unit. Capital expenditures for this project have been approved, and construction is currently anticipated to begin later in 2019 and to be complete in second or third quarter 2020, with startup shortly thereafter.

On March 18, 2019, during routine tank inspections, Navajo identified that Tank 737 (sour water tank) has a damaged seal that may be contributing to detected benzene fenceline concentrations on the west side of the refinery. Planning and coordination for removing this tank from service for cleaning and repair has required more than 45 days. Tank 737 was isolated from receiving material on April 24<sup>th</sup>. The tank contents were emptied and removed from service with the roof being landed on June 16, 2019. The tank cleaning has been completed, allowing the primary seal on the tank to be repaired.

If you have questions regarding this corrective action plan, please contact me at [Scott.Denton@HollyFrontier.com](mailto:Scott.Denton@HollyFrontier.com) or by phone at 575-746-5487.

Sincerely,



Scott M. Denton  
Environmental Manager

<sup>1</sup> As explained in our May 15, 2019 submittal, Tank 57 was taken out of service on November 20, 2018 by lowering the liquid level in the tank and leaving approximately 15 feet of product, short of landing the roof.. During this time, product was not moved into or out of the tank.

<sup>2</sup> By isolation from service, we mean that product remains in Tank 106, but it is not being moved into or out of the Tank.

Bureau Chief

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Enclosure: Figure 1: Map of Navajo Artesia Fenceline Monitoring Locations

Cc: Chief  
Air, Toxics, and Inspections Coordination Branch  
Environmental Protection Agency, Region 6  
1445 Ross Avenue  
Dallas, TX 75202-2733

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HollyFrontier: T. Wheeler, S. Gokhale; T. Jones, R. Bagherian  
Morgan, Lewis & Bockius LLP: J. Hurwitz



# EXPLANATION

- ▲ GPS LOCATION
- SITE BOUNDARY (320.72 ACRES)



1252 Commerce Drive  
Laramie, WY 82070  
www.trihydro.com  
(P) 307/745.7474 (F) 307/745.7726

Drawn By: CF

Checked By: JS

Scale: 1" = 500'

Date: 11/17/16

File: HF\_Navajo\_FencelineMonitoring.mxd

FIGURE 1

FENCELINE MONITORING SAMPLING STATIONS

HOLLYFRONTIER NAVAJO REFINING LLC  
ARTESIA, NEW MEXICO